

In the Claims:

Please amend the Claims as follows:

1. (Currently Amended) A system for automated secure digital mobile video monitoring and recording, the system comprising:

~~an-~~ mobile authenticated acquisition subsystem having at least one video camera for capturing and simultaneously digitally watermarking video data in real-time;

a video management subsystem in intermittent signal communication with the mobile authenticated acquisition subsystem for storage, viewing and verification of the digitally watermarked video data on demand; and

a secure wireless video transfer subsystem in signal communication between the acquisition and management subsystems for automatically transferring the digitally watermarked video data whenever the mobile authenticated acquisition subsystem moves within wireless range of the video management subsystem.

2. (Original) A system as defined in Claim 1, the video management subsystem comprising a video database for storing video data.

3. (Original) A system as defined in Claim 1 wherein the video management subsystem is in intermittent signal communication with the authenticated acquisition subsystem.

4. (Original) A system as defined in Claim 1, the authenticated acquisition subsystem comprising a video imaging device for acquiring original video data.

5. (Original) A system as defined in Claim 1, the authenticated acquisition subsystem comprising a watermarking device for applying at least one signature to the video data.

6. (Original) A system as defined in Claim 1, the video management subsystem comprising a verification device for verifying at least one signature in the video data.

7. (Original) A system as defined in Claim 1, the video management subsystem comprising a watermark verifying playback device for verifying at least one signature and displaying verified video data.

8. (Original) A system as defined in Claim 1, further comprising a secure wireless transfer subsystem.

9. (Original) A system as defined in Claim 8, the secure wireless transfer subsystem comprising:

at least one wireless client; and

at least one wireless access point in wireless signal communication with said at least one wireless client.

10. (Original) A system as defined in Claim 1, further comprising watermarking means for digitally watermarking the video data.

11. (Original) A system as defined in Claim 10, further comprising verification means in signal communication with the watermarking means for verifying the digitally watermarked video data.

12. (Original) A system as defined in Claim 2, further comprising a mobile playback device in signal communication with said video database for receiving and displaying stored video data.

13. (Original) A system as defined in Claim 1, the video management subsystem comprising at least one camera for capture and wireless transmission of video data from a fixed location to mobile clients.

14. (Original) A system as defined in Claim 1, further comprising at least one second authenticated acquisition subsystem in wireless signal communication with the first authenticated acquisition subsystem to form a peer-to-peer mobile broadband wireless network facilitating video data transfer among mobile clients.

15. (Currently Amended) A method of automated secure digital mobile video monitoring and recording, the method comprising:

capturing and simultaneously digitally watermarking video data in real-time with a mobile authenticated acquisition subsystem;

verifying the digitally watermarked video data on demand with a video management subsystem; and

coordinating communications of the digitally watermarked video data by automatically transferring the digitally watermarked video data to the video management subsystem whenever the mobile authenticated acquisition subsystem moves within wireless range of the video management subsystem.

16. (Original) A method as defined in Claim 15, further comprising intermittently transmitting the digitally watermarked video data prior to verification.

17. (Original) A method as defined in Claim 16, further comprising storing the digitally watermarked video data at a fixed location.

18. (Original) A method as defined in Claim 17, further comprising:  
wirelessly transmitting the stored video data from the fixed location to at least one mobile system; and  
displaying the transmitted video data.

19. (Original) A method as defined in Claim 15, further comprising compressing the digitally watermarked video data prior to verification.

20. (Original) A method as defined in Claim 15, further comprising acquiring original video data.

21. (Original) A method as defined in Claim 15, further comprising:  
acquiring original video data at a fixed location;  
wirelessly transmitting the acquired video data from the fixed location to at least one mobile system; and  
displaying the transmitted video data.

22. (Original) A method as defined in Claim 15, further comprising applying at least one signature to the video data.

23. (Original) A method as defined in Claim 15, further comprising verifying at least one signature in the video data.

24. (Original) A method as defined in Claim 23, further comprising displaying verified video data.

25. (Original) A method as defined in Claim 23, further comprising wirelessly transmitting the verified video data from a fixed location to at least one mobile system.

26. (Original) A method as defined in Claim 15, further comprising:  
capturing video data at a fixed location; and  
transmitting the captured video data from the fixed location to a mobile client.

27. (Original) A method as defined in Claim 15, further comprising wirelessly transmitting video data within a peer-to-peer mobile broadband wireless network to facilitate interoperability among mobile clients.

28. (Currently Amended) A computer-readable medium encoded with a data structure including a digital video data file encoded-with signal data

comprising a plurality of block transform coefficients indicative of a secure digital mobile video recording, the coefficients collectively indicative of an original video data sequence with a secure invisible watermark, the secure watermark comprising a plurality of signatures, including a robust identity signature to establish the identity of a watermarked mobile video recording (MVR) and to indicate the presence of a watermark, and a semi-fragile control signature to facilitate the characterization of the type of modifications done to a watermarked MVR.

29. (Currently Amended) A computer-readable medium ~~digital video data file~~ as defined in Claim 28, the digital video data file achieving progressively varying robustness in a single watermark by means of at least one of error-correcting signature coding and rate-distortion guided bit embedding.

30. (New) A system as defined in Claim 1 wherein the mobile authenticated acquisition subsystem comprises a real-time hybrid watermarking algorithm combining in a single watermark a robust identity signature to establish the identity of a watermarked mobile video recording (MVR) and to indicate the presence of a watermark, and a semi-fragile control signature to facilitate the characterization of the type of modifications done to a watermarked MVR.

31. (New) A system as defined in Claim 30 wherein:

the robust identity signature comprises error-correcting signature coding to characterize the severity of content alteration; and

the semi-fragile control signature comprises rate-distortion guided bit embedding to localize content tampering.

32. (New) A method as defined in Claim 15 wherein digitally watermarking comprises hybrid watermarking by combining in a single watermark a robust identity signature to establish the identity of a watermarked mobile video recording (MVR) and to indicate the presence of a watermark, and a semi-fragile control signature to facilitate the characterization of the type of modifications done to a watermarked MVR.